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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,309	02/21/2008	Christian Prehofer	64923 (51969)	7765

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EXAMINER
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WOO, KUO-KONG

ART UNIT	PAPER NUMBER
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2617

NOTIFICATION DATE	DELIVERY MODE
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12/08/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/569,309	<b>Applicant(s)</b> PREHOFER ET AL.	
	<b>Examiner</b> KUO WOO	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 August 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 64-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 64-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Information Disclosure Statement***

1. The information disclosure statement (IDS) filed on 6/5/09 has been considered

***Response to Amendment***

2. This action is response to the communication filed on August 20, 2009.
3. Claims 64-83 are pending in the application. Claims 64-83 have been amended.
4. Applicant's arguments with respect to claims 64-83 have been considered but are moot in view of the new ground(s) of rejection.

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***Remarks***

5. Applicant amended limitation with respect to the first and second terminal nodes. Specifically, the first terminal node is addressable by a global source address and the second terminal node is addressable by an ad hoc designation address to overcome rejection under 35 U.S.C. § 102 (e) and rejection under 35 U.S.C. § 103(a). After careful reviewed amended claims, prior art references Inoue discloses gateway function between first terminal has Global address and Ad hoc address with accounting information to properly charge the user and notification scheme to verify the packet has been delivered. Yuan discloses tunneling setup to overcome deficiency of Inoue's invention.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 64-83 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Inoue (US PGPUB 2002/0036991 A1) in views of Yuan (US PAT 6,496,704 B2).

Regarding claim 64, Inoue disclose “ a transmission/reception unit adapted to receive transmission information from said first terminal node and to transmit said transmission information to said second terminal node” (¶14, a mobile terminal device belonging to some mobile carrier network can access a fixed communication network ( first node) via a local network/gateway second node);

b) “an acknowledgment information detection unit ( ¶19, **the gateway device** having: a processing unit configured to judge whether a packet received from a fixed communication network side and destined to a mobile communication network side via the mobile terminal device is to be relayed to the mobile terminal device or not according to an attribute of the packet **upon receiving the packet**) adapted to detect the receipt of acknowledgment information from said second terminal node acknowledging that said second terminal station has received said transmission information” ;

However, Inoue does not explicitly disclose tunnel setup between the fix terminal and ad hoc node.

In an analogous art, Yuan disclose “wherein said transmission/reception unit comprises a first tunnel setup between gateway and second terminal node, wherein transmission/reception unit transmits transmission information and receives

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acknowledgment information from second terminal node respectively through first tunnel link. (Col 11, Lines 60, the transmission path 156 acts as a bi-directional encapsulation that provides a connection between the MDIS (first gateway terminal) and the HA (second terminal node) In particular, the embodiment shown in FIG. 7 passes messages to and from the mobile unit 116 between the MDIS 152 and HA 154 such that the bi-directional encapsulation tunnel 156 serves as a virtual private network connection for the mobile unit 116 and the home network thereof.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Inoue teaching in combination of Yuan ( Col.7, Lines 8 provides a bi-directional encapsulation tunnel between the Mobile IP host and the home agent).

Rationales for arriving at a conclusion of obviousness suggested by the Supreme Court's decision in KSR include:

Combine prior art elements according to known method to yield predictable result.

Regarding claims 65 and 76, Inoue discloses "an accounting unit ( ¶16, the gateway device having: an accounting condition notification unit configured to notify the accounting condition for the mobile terminal device to access the fixed communication network through the gateway device when the device identification information notified from the mobile terminal device is not registered at the gateway device in advance, to the mobile terminal device) and (¶108, a configuration regarding **the accounting** as explained with reference to FIG. 5 and (2) a configuration regarding the log as explained with reference to FIG. 7 can be realized in combination. To access the ISP network

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through the gateway device when the user of this mobile terminal device 20 accepts the charge) adapted to determine charge information for the transmission if acknowledgment information detects the receipt of acknowledgment information to second terminal station".

Regarding claims 66 and 77, Yuan discloses "the gateway , ( Col.1, Lines 63, The MDIS 28 is a network gateway and also controls the MDBS 26 in connection with radio resource management ) characterized by transmission information characteristics ( Col.6, Lines 16, encompass any system capable of carrying signals representative of information ( **data rate and type of data**) between a first data processing system and a second data processing system and can include LANs, WANs, internets, intranets, cellular broadcasting systems and systems that exchange information, in part or in whole, as radio-frequency signals, optical signals, electrical signals, or by any other medium suitable for carrying data ).determining unit adapted to determine transmission characteristics of the transmission of said transmission information to said second terminal node".

Regarding claims 67 and 78, Yuan discloses "(TIM) is adapted to determine as TCH one or more selected from data amount (Col.6, Lines 27 encompass any system capable of **tracking a network connection** to a mobile data device and for **routing data** to the mobile data device, and can include a Mobile IP home agent, a CDPD MDIS or any other suitable system. A mobility service controller can be a **data processing system** (data amount)operating a computer program that directs the data processing system to track the network connection of a mobile data device) , a transmission speed,

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route and delay time of the packet transmission” ( Col. 12, Lines 48, The MDIS ( Gateway) registers with the home MDIS. The registration step (data packet transmission character, speed. .etc) includes a redirection request process that directs the home MDIS 180 to forward data packets to MDIS).

Regarding claims 68 and 81, Inoue discloses “characterized in that said second ad hoc network is a packet switched network (§119, the packet to the mobile terminal device through the local network (Ad hoc network) when the packet is judged to be relayed by the processing unit), said transmission information comprises one or more transmission packets, and said acknowledgement information (§120, an identification information notification unit configured to notify a device identification information of the mobile terminal device and a mobile carrier identification information of a mobile carrier to which the mobile terminal device belongs) comprises one or more acknowledgment packets”

Regarding claims 69 and 79, Inoue discloses “the gateway, characterized by an acknowledgment request unit adapted to transmit to said second terminal node an acknowledgment request packet including a predetermined sequence number (§143, FIG. 8 is a sequence chart for a processing in the case where a mobile terminal device enters a local network in the communication system) of a transmission packet”

Regarding claim 70 is drawn to the apparatus corresponding to the method of using same as claimed in claims 64. Therefore apparatus claim 70 corresponds to claim 64, and is rejected for the obviousness as used above.

Regarding claim 71, is drawn to the method used by the corresponding apparatus claim 64 and are rejected for the same reasons.

Regarding claims 72 and 81, are drawn to the method used by the corresponding apparatus claim 68 and is rejected for the same reasons.

Regarding claim 73, Inoue discloses “the terminal node, characterized by a packet retransmission request including sequence number transmission packet which is requested to be retransmitted from gateway”. (¶96, Upon receiving this message ( packet retransmission) , the gateway device checks whether the device ID contained in the message is registered in the telephone network access permission list or not, and if it is registered, the gateway device provides the gateway service with respect to this mobile terminal device 20 such that this **mobile terminal device** can access the ISP network 9 through the gateway device 1 (a message indicating this fact may be transmitted from the gateway device 1 to the mobile terminal device 20).

Regarding claims 74, 75 and 80, method claims are drawn to the method of using the corresponding apparatus claimed in claim 64. Therefore method claims 74, 75 and 80 correspond to apparatus claims 64 are rejected for the same reasons of anticipation as used above.

Regarding claims 82 and 83, Inoue discloses “code sections for respectively carrying out the functions of the gateway”. (¶141, implemented using a conventional general purpose digital computer programmed according to the teachings of the present specification, as will be apparent to those skilled in the software art).



***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on Monday through Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/  
Examiner, Art Unit 2617

/LESTER KINCAID/  
Supervisory Patent Examiner, Art Unit 2617